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## **A Study of the Turkish Ichneumonidae (Hymenoptera). V. Cryptinae, Phygadeuontini**

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**A b s t r a c t :** Faunistic data of 26 species from the subfamily Cryptinae, tribe Phygadeuontini are given. Fifteen species, noted in the text by asterisk, are new records for the Turkish fauna. For each species a short zoogeographical characterization is given.

**K e y w o r d s :** Ichneumonidae, fauna, Turkey, Cryptinae, Phygadeuontini, new records

### **Introduction**

Cryptinae is the largest subfamily of Ichneumonidae and comprises more than 4.500 species in the world (YU & HORSTMANN 1997). Tribe Phygadeuontini includes most of the smaller members of the subfamily. It differs from the other tribes by second recurrent vein (2m-cu) usually inclivous and with two bullae, but sometimes vertical and with only one bulla; the propodeum nearly always with both longitudinal and transversal carinae; male almost always without pale colour on the face. A key for the genera of Phygadeuontini has been reported mainly by TOWNES (1970) and HORSTMANN (1978, 1993).

Phygadeuontini are parasites of small cocoons or cocoon-like structures (cocoons of small Lepidoptera, Symphyta, Chrysopidae, Hemerobiidae, aquatic Coleoptera, Ichneumonoidea, egg cocoons of spiders, etc.). About 1/3 of the species are secondary parasites.

The Phygadeuontini fauna of Turkey is not well studied. In the catalogue of KOLAROV (1995) only 28 species were listed. Data of Turkish Phygadeuontini were published by SEDIVY (1959), HORSTMANN (1983), SAWONIEWICZ & LUHMAN (1992), KOLAROV (1987), BEYARSLAN & KOLAROV (1994), KOLAROV et al (1997 and 2002) and some others. Until now, 58 species of Phygadeuontini have been reported from Turkey.

In the present paper faunistic data of 26 Phygadeuontini species from Turkey are listed. Of them, 15 species are new records for the Turkish fauna (in the text they are marked by an asterisk). For every species a short zoogeographical characterization is given.

## List of the species

### Tribe Phygadeuontini

#### *Aclastus gracilis* (THOMSON 1884)

**Material:** Isparta, Yikari Gökdere, 1050 m, 12.05.2004, 4♂♂; 23.05.2004, 1♀; 12.05.2004, 2♂♂; 7.06.2004, 1♂; Isparta, Kirazlidere, 1100 m, 25.07.2002, 1♂; Isparta, Yılanlı, 1250 m, 22.05.2004, 4♂♂; Isparta, Gölcük, 1200 m, 18.05.2004, 1♂; Egridir, Kasnak Meshesi, 1450 m, 8.05.2004, 1♂.

**Distribution:** Holarctic region.

#### \**Aclastus transversalis* HORSTMANN 1980

**Material:** Sutchuler, 1250 m, 10.05.2002, 1♂.

**Distribution:** Western Europe.

#### \**Acrolyta semistrigosa* (SCHMIEDEKNECHT 1897)

**Material:** Isparta, Sav, 1050 m, 28.06.2004, 1♂.

**Distribution:** United Kingdom, France, Germany, Poland, Romania, Moldova and Bulgaria.

#### \**Bathythrix decipiens* (GRAVENHORST 1829)

**Material:** Isparta, Agliköy, 22.05.2004, ♂.

**Distribution:** Europe.

#### *Bathythrix lamina* (THOMSON 1884)

**Material:** Egridir, Kasnakmeshesi, 1450 m, 2.07.2004, 2♀♀.

**Distribution:** Europe and Turkey.

#### \**Blapsidotes vicinus* (GRAVENHORST 1829)

**Material:** Isparta, Gölcük, 1200 m, 7.06.2004, 1♂; Isparta, Gönen, 1060 m, 8.10.2002, 1♂; Isparta, Dere mahalesi, 1100 m, 7.07.2004, 1♂; Cünür, 1000 m, 5.06.2004, 1♂; Isparta, Madenli, 10.07.2002, 1♂; Isparta, Güneikent, 1100 m, 12.05.2004, 1♂; Isparta, Sav, 1050 m, 21.01.2004, 1♂; 28.06.2004, 1♂; Isparta, Yalanlı, 1250 m, 22.05.2004, 1♂; Burdur, Aglasun, 850 m, 3.05.2003, 1♂; Antalya, Avlan beli, 29.05.2004, 1♂.

**Distribution:** Europe.

#### *Diaglyptellodes sculpturator* (AUBERT 1977)

**Material:** Isparta, Uluborlu, 1060 m, 12.05.2004, 1♂.

**Distribution:** Morocco, Tunisia, Spain, Italia, Slovakia, Greece, Bulgaria, Turkey and Turkmenia.

***Dichrogaster aestivalis* (GRAVENHORST 1829)**

**M a t e r i a l :** Isparta, Yalanli, 1250 m, 22.05.2004, 5♂♂; Isparta, Gölcuk, 1200 m, 7.06.2004, 1♂; Isparta, Agliköy, 1250 m, 22.05.2004, 5♂♂; Isparta, Sav, 1050 m, 28.06.2004, 1♂; Egridir, Kasnakmeshesi, 1550 m, 7.06.2004, 5♂♂; 2.07.2004, 1♂; Anatolia, Avlan beli, 1120 m, 29.05.2004, 1♂.

**D i s t r i b u t i o n :** Western Palearctic region.

***Dichrogaster longicaudata* (THOMSON 1884)**

**M a t e r i a l :** Isparta, Kirazlidere, 1150 m, 7.06.2004, 2♂♂; Isparta, Yalanli, 1250 m, 22.05.2004, 6♂♂; Egridir, Kasnakmeshesi, 1450 m, 7.06.2004, 4♂♂; Isparta, Gölcuk, 1200 m, 7.06.2004, 2♂♂; Isparta, Yikari Gökdere, 1150 m, 23.05.2004, 1♂; Isparta, Sav, 1050 m, 28.06.2004, 1♂.

**D i s t r i b u t i o n :** Holarctic region.

**\**Dichrogaster perlae* (DOUNMERC 1855)**

**M a t e r i a l :** Isparta, Kirazlidere, 1150 m, 19.06.2004, 1♂.

**D i s t r i b u t i o n :** Europe.

***Dichrogaster saharator* (AUBERT 1964)**

**M a t e r i a l :** Isparta, Uluborlu, 1060 m, 12.05.2004, 1♀.

**D i s t r i b u t i o n :** Algeria, Egypt, Turkey and Izrael.

**\**Dichrogaster schimitscheki* (FAHRINGER 1935)**

**M a t e r i a l :** Isparta, Yalanli, 1250 m, 22.05.2004, 5♂♂; Isparta, Gölcuk, 1200 m, 7.05.2004, 1♂; 7.06.2004, 1♂; Isparta, Agliköy, 1250 m, 22.05.2004, 1♂; Egridir, Kasnakmeshesi, 1450 m, 7.06.2004, 1♀.

**D i s t r i b u t i o n :** Europe and North America.

***Endasys brevis* (GRAVENHORST 1829)**

**M a t e r i a l :** Isparta, Yikari Gökdere, 1150 m, 22.05.2004, 1♂.

**D i s t r i b u t i o n :** Europe.

**\**Endasys femoralis* (HABERMEHL 1912)**

**M a t e r i a l :** Isparta, Dere mahalesi, 1100 m, 7.07.2004, 1♂.

**D i s t r i b u t i o n :** Europe.

**\**Endasys minutulus* (THOMSON 1883)**

**M a t e r i a l :** Egridir, Kasnakmeshesi, 1450 m, 7.06.2004, 4♂♂.

**D i s t r i b u t i o n :** Holarctic region.

***Endasys plagiator* (GRAVENHORST 1829)**

M a t e r i a l : Egridir, Kasnakmeshesi, 1450 m, 7.06.2004, 1 ♂.

D i s t r i b u t i o n : Europe and Turkey.

**\**Endasys senilis* (GMELIN 1790)**

M a t e r i a l : Isparta, Merkez, 15.06.2004, 1 ♂.

D i s t r i b u t i o n : Europe.

**\**Glyphicnemis profligator* (FABRICIUS 1775)**

M a t e r i a l : Isparta, Yalanli, 1250 m, 22.05.2004, 1 ♂.

D i s t r i b u t i o n : Palearctic region.

***Glyphicnemis vagabunda* (GRAVENHORST 1829)**

M a t e r i a l : Isparta, Kirazli dere, 1150 m, 7.06.2004, 1 ♂; Isparta, Gönen, 14.04.2002, 1 ♂.

D i s t r i b u t i o n : Europe.

**\**Isadelphus armatus* (GRAVENHORST 1829)**

M a t e r i a l : Isparta, Dere mahalesi, 1100 m, 7.07.2004, 1 ♂.

D i s t r i b u t i o n : Europe.

**\**Lochetica westoni* (BRIDGMAN 1880)**

M a t e r i a l : Anatalia, Avlan beli, 1120 m, 29.05.2004, 1 ♀.

D i s t r i b u t i o n : Palearctic region.

***Lysibia nana* (GRAVENHORST 1829)**

M a t e r i a l : Egridir, Kasnakmeshesi, 1450 m, 2.07.2004, 1 ♀.

D i s t r i b u t i o n : Holarctic, Oriental and Oceanic region.

**\**Phygadeuon trichops* THOMSON 1884**

M a t e r i a l : Isparta, Sav, 1100 m, 30.04.2003, 1 ♀.

D i s t r i b u t i o n : Europe, introduced in Canada.

**\**Phygadeuon vexator* (THUNBERG 1822)**

M a t e r i a l : Isparta, Yikari Gökdere, 1200 m, 12.05.2004, 1 ♀.

D i s t r i b u t i o n : Western Europe.

***Rhembobius quadrispinus* (GRAVENHORST 1829)**

M a t e r i a l : Isparta, Gölcuk, 1050 m, 26.05.2004, 1 ♂.

D i s t r i b u t i o n : Europe.

**\**Zoophthorus australis* (THOMSON 1885)**

**M a t e r i a l :** Isparta, Uluborlu, 1050 m, 12.05.2004, 1 ♀.

**D i s t r i b u t i o n :** France, Italy and Israel.

**Discussion**

More of the species are rare and were established from only one locality. Dominant species are *Blapsidotes vicinus*, *Aclastus gracilis*, *Dichrogaster aestivalis*, *Dichrogaster longicaudata* and *Dichrogaster schimitscheki*. With this study the number of known Turkish Phygadeuontini arises to 73 species.

**Zoogeographical characterization**

The zoogeographic characterisation follows the chorotype classification of the Near East fauna, proposed by TAGLIANTI et al. (1999). After investigation of the recent geographical distribution of the species, treated above, they can be divided into the following groups:

1. Species with ranges in two zoogeographical regions – *Lysibia nana*.
2. Four species have Holarctic chorotypes – *Aclastus gracilis*, *Dichrogaster longicaudata*, *D. schimitscheki* and *Endasys minutulus*.
3. Two species – *Glyphicnemis profligator* and *Lochetica westoni* – have palearctic range.
4. Only one species has Western palearctic chorotype – *Dichrogaster aestivalis*.
5. Species with Mediterranean chorotypes are *Diaglyptellodes sculpturator*, *Dichrogaster saharator* and *Zoophthorus australis*.
6. Most species have European chorotypes. Here belong *Aclastus transversalis*, *Acrolyta semistrigosa*, *Bathythrix decipiens*, *Bathythrix lamina*, *Blapsidotes vicinus*, *Dichrogaster perlae*, *Endasys brevis*, *Endasys femoralis*, *Endasys plagiator*, *Endasys senilis*, *Glyphicnemis vagabunda*, *Isadelphus armatus*, *Phygadeuon trichops*, *Phygadeuon vexator* and *Rhembobius quadrispinus*.

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**Zusammenfassung**

Faunistische Angaben zu 26 Cryptinae Arten der Tribus Phygadeuontini, Unterfamilie Cryptinae werden gegeben. Fünfzehn Arten davon sind neu für die Türkei. Für jede Art werden Informationen zur Gesamtverbreitung angeführt.

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